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EXAMINER

LACLAIR, DARCY D

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/565,324	Applicant(s) UEDA ET AL.	
	Examiner Darcy D. LaClair	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/21/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. All outstanding rejections, except for those maintained below are withdrawn in light of the amendment filed on 10/21/2008.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Upon reconsideration of the claims and an updated search, new grounds of rejection are set forth below which were are not necessitated by applicant's amendment.

Thus, *a 2nd non-final Office action is set forth as follows.*

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 1796

Double Patenting, I

2. **Claims 1, 6-10, 22-26** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over **claims 1-4, 6, 21-22, 24, 26, 27-29** of copending **Application No. 10/555,707** (Published as **US 2006/0276598**). Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications teach similar highly absorbent resin compositions and uses thereof.

With regard to Claim 1, 8, and 10, the copending application claims a process for production of a water absorbent resin (claim 1) or a water absorbent resin having a water absorption capacity of not less than 40 g/g without load (claim 3, 10), a total absorption capacity not less than 78 g/g (claim 28), and not less than 70 g/g *under load* (claim 4), which includes an inorganic powder (claim 26) or a deodorant (claim 27). The specification of the copending application teaches that favorable deodorants include "composite hydrous oxides of zinc-silicon or zinc-aluminum, which are cited in Japanese patent Application 280373/2003," (see p. 32, line 10) to which the instant application claims priority. Note MPEP 804: "Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in the application defines an obvious variation of an invention claimed in the patent. In re Vogel, 422 F.2d 438, 441-42, 164 USPQ 619, 622 (CCPA 1970)." With regard to the content of zinc-silicon or zinc-aluminum, when faced with a mixture, one of ordinary skill in the art would be motivated by common sense to select a 1:1 ratio, a ratio that falls within the presently claimed amount, absent evidence of unexpected or surprising results. Case law holds that

Art Unit: 1796

"[h]aving established that this knowledge was in the art, the examiner could then properly rely... on a conclusion of obviousness, 'from common knowledge and common sense of the person of ordinary skill in the art within any specific hint or suggestion in a particular reference.'" *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

With regard to Claim 6 and 7, the copending application teaches that a suitable deodorant includes extracts from leaves of Theaceae plants (see p. 32 line 8), and additives including hydrophilic short fibers may also be included (see p. 31 line 15), and in certain uses, a fibrous material is favorable (see p. 34 line 5-6, p. 50 line 5).

With regard to Claims 9 and 22, the copending application teaches that a back sheet made of liquid impermeable material, and a surface (top) sheet made of liquid permeable material can be put on the two sides of a molded portion of this water absorbent resin. (see p. 42, Example 3)

With regard to Claims 23 and 25, the copending application claims the resin has a temperature of 40 to 80°C when the surface crosslink-treating agent is added (claim 2) and teaches the crosslinking treatment is carried out by heating after the agent has been added, specifically in a range of 60 to 260°C, particularly preferably from 120°C to 200°C. (see p. 22 line 21-30)

With regard to Claims 24 and 26, the copending application claims the surface-crosslinking agent includes a polyhydric alcohol. (claim 22)

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. **Claims 1, 6-10, 22-26** directed to an invention not patentably distinct from **claims 1-4, 6, 21-22, 24, 26, 27-29** of commonly assigned copending **Application No. 10/555,707**. Specifically, see the discussion above, in paragraph 2.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned copending **Application No. 10/555,707**, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Double Patenting, II

4. **Claims 1, 4, 6-10, 22-26** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over **claims 1-6, 10, 12, 14, 18-25** of copending **Application No. 10/570,965** (Published as **US 2007/0066167**).

Art Unit: 1796

Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications teach similar highly absorbent resin compositions and uses thereof.

With regard to Claim 1, 8, and 10, the copending application claims a particulate water absorbent resin (claim 1, 2, 3) or a method for making a water absorbent resin (claim 20, 21, 22) having a water absorption capacity of not lower than 21 g/g against a pressure of 4.8 kPa, (claim 3, 18), or not lower than 20 g/g against a pressure of 1.9 kPa (claim 6) which includes a polyvalent metal salt, an inorganic fine particle, and a deodorant (claim 10). The inorganic fine particle can be a composite hydrated oxide (claim 14) The specification teaches that a composite hydrated oxide containing zinc and silicon or zinc and aluminum can be added. (see p. 38 line 7-13) It would be obvious, in the absence of any direct teaching, to employ either of these hydrated oxides with a ratio of 50/50, which falls within the claimed range of the instant application.

With regard to Claim 4, the copending application claims the median particle size of the water absorbing agent in the range 200 to 400 μm , (claim 1-3, 20-22), 90 – 100% by weight of the particulate has a diameter in the range 150 μm to 600 μm (claim 5), and a step or removing coarse particles having diameters above 400 μm is claimed (claim 23-25).

With regard to Claim 6 and 7, the copending application claims a deodorant which is a component made from a plant (claim 12), and an absorbing article which is

Art Unit: 1796

molded by comprising a particulate water absorbing agent and hydrophilic fibers (claim 19).

With regard to Claims 9 and 22, the copending application teaches that an absorbing article prepared by sandwiching the absorbing core between a substrate with liquid permeability (surface sheet) and a substrate with liquid non-permeability (back sheet). (see p. 49, line 25-28)

With regard to Claims 23 and 25, the copending application teaches that the heating temperature after addition of the surface crosslinking agent is in the range of 100 to 250°C. (see p. 30 line 30-33)

With regard to Claims 24 and 26, the copending application teaches a surface-crosslinking agent can be polyhydric alcohol. (see p. 29 line 3-9)

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Double Patenting, III

5. **Claims 1, 4, 6-10, 22** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over **claims 1-5, 9-10** of copending **Application No. 11/662,590** (Published as **US 2008/0075937**). Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications teach similar highly absorbent resin compositions and uses thereof.

With regard to Claim 1, 8, and 10, the copending application claims a particulate water absorbent resin (claim 1, 2) or a method for making a water absorbent

Art Unit: 1796

resin (claim 10) having a water an absorbency under a pressure of 4.8 kPa of not less than 20 g/g (claim 1,2). The water absorbing agent further contains a multivalent metallic salt, an inorganic fine particle, and a deodorant (claim 4). The specification of the copending application teaches a composite hydrous oxide as a deodorant which contains a “composite hydrous oxides of zinc-silicon or zinc-aluminum, (see Japanese Unexamined patent Application Tokugan 2003-280373” (see p. 55, line 20-25) to which the instant application claims priority. It would be obvious, in the absence of any direct teaching, to employ either of these hydrated oxides with a ratio of 50/50, which falls within the claimed range of the instant application.

With regard to Claim 4, the copending application claims the mass average particle diameter of the water absorbing agent in the range 200 to 450 μm , with 0-5% mass being smaller than 150 μm . (claim 1-2,10)

With regard to Claim 6 and 7, the copending application teaches a plant extract (see p. 54 line 1-11), and claims hydrophilic fibers as a part of the structure formed from the particulate water absorbing agent (claim 9).

With regard to Claims 9 and 22, the copending application teaches that an absorbing article prepared by sandwiching the absorbing core between a substrate with liquid permeability (surface sheet) and a substrate with liquid non-permeability (back sheet). (see p. 74, line 11-14)

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1796

Double Patenting, IV

6. **Claims 1, 4, 6-10, 22-26** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over **claims 1, 6, 11-15, of U.S. Patent No. 7473470**. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications teach similar highly absorbent resin compositions and uses thereof.

With regard to Claim 1, 8, and 10, the copending application claims a particulate water absorbent resin (claim 1) or a method for making a water absorbent resin (claim 15) having a centrifuge retention capacity not lower than 32 g/g, and absorbency against pressure of 1.9 kPa of not lower than 20 g/g (claim 6) which includes a polyvalent metal salt, an inorganic fine particle, and a deodorant (claim 11). The specification teaches that a composite hydrated oxide containing zinc and silicon or zinc and aluminum can be added. (see p. 39 line 19-25) It would be obvious, in the absence of any direct teaching, to employ either of these hydrated oxides with a ratio of 50/50, which falls within the claimed range of the instant application.

With regard to Claim 4, the copending application claims the mass median particle size of the water absorbing agent in the range 200 to 400 μm , and particles of the agent smaller than 600 μm and not smaller than 150 μm are in the range of 95 – 100% by weight (claim 1, 15).

With regard to Claim 6 and 7, the copending application describes a deodorant which is a component made from a plant (see p. 37 line 12-33), and claims an absorbing article which is molded by comprising a particulate water absorbing agent and hydrophillic fibers (claim 12, 14).

With regard to Claims 9 and 22, the copending application teaches that an absorbing article prepared by sandwiching the absorbing core between a substrate with liquid permeability (surface sheet) and a substrate with liquid non-permeability (back sheet). (see p. 50, line 1-5)

With regard to Claims 23 and 25, the copending application teaches that the heating temperature after addition of the surface crosslinking agent is in the range of 100°C to 250°C. (see p. 28 line 1-7)

With regard to Claims 24 and 26, the copending application teaches a surface-crosslinking agent can be polyhydric alcohol. (see p. 26 line 5-11)

7. **Claims 1, 4, 6-10, 22-26** directed to an invention not patentably distinct from **claims 1, 6, 11-15** of commonly assigned **U.S. Patent No. 7473470**. Specifically, see the discussion above, in paragraph 6.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned **U.S. Patent No. 7473470**, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions

Art Unit: 1796

were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Takai et al. (US 6,284,362)** in view of **Yamada et al. (EP 0 282 287)**.

With regard to Claim 1 and 10, Takai teaches an absorbent composition having a microfiller and a hydrogel having a water absorptive resin, (see abstract) prepared by mixing a microfiller with a water absorptive resin in a hydrogel. (see col 3 line 45-50) The water absorbent resin has a crosslinked structure and an absorption amount for physiological saline under applied pressure of 20 g/cm² that is 25 g/g or more. (see col 4 line 63-65) Twenty grams per centimeter squared is equal to 1.96 kPa. The resin is obtained by polymerizing a radical polymerizable monomer such as unsaturated mono or polycarboxylic acids. (see col 7 line 1-7, 26-44) The microfiller may be an inorganic

Art Unit: 1796

filler, or one or a mixture of at least two selected from a group including silicon and aluminum oxides. (see col 4 line 40-45) Furthermore, Takai teaches that deodorants, zeolite, and so forth may be added to the mixture during or after the drying step. (see col 15 line 10-13) Takai does not explicitly teach the details for a mixture of these oxides or the use of zinc in combination with these metal oxides.

Yamada teaches a deodorizer which is a complex metal oxide hydrate of the composition SiO_2 (5-80 mole%), $\text{MO}_{n/2}$ (5-65 mole%), Al_2O_3 (0-60 mole%), where M can be zinc, in combination with a polymer absorbent powder as a liquid absorbent. (see p. 3 line 20-35). Because the molecular weight of zinc oxide (81.4 g/mol) is more than that of silicon dioxide (60.1 g/mol), the contribution of zinc oxide will be more significant when the percentages are reported in weight percent, rather than mol percent. For simplicity, taking the case where Al_2O_3 is zero percent (absent), ZnO would be from 20 to 60 mol% and SiO_2 would be from 40 to 80 mol%. In weight percent, this ratio is 25-67% zinc oxide and 33% to 75% silicon dioxide. This includes mass ratio from 25/75 to 67/33, which overlaps with applicant's claimed range. It is well settled that where the prior art describes the components of a claimed compound or compositions in concentrations within or overlapping the claimed concentrations a prima facie case of obviousness is established. See *In re Harris*, 409 F.3d 1339, 1343, 74 USPQ2d 1951, 1953 (Fed. Cir. 2005); *In re Peterson*, 315 F.3d 1325, 1329, 65 USPQ 2d 1379, 1382 (Fed. Cir. 1997); *In re Woodruff*, 919 F.2d 1575, 1578 16 USPQ2d 1934, 1936-37 (CCPA 1990); *In re Malagari*, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974)

It would be obvious, given that the microfiller of Takai may be an inorganic filler, or a metal oxide, to use the metal oxide of Yamada. Takai indicates that deodorants or zeolites may be used to further enhance the resin composition. Employing the metal oxide of Yamada's invention would provide this inorganic filler or metal oxide while also achieving Takai's aim of deodorizing the resin. Furthermore Yamada describes explicitly that the complex oxide hydrate of the invention can be ***mixed*** together with a polymer absorbent in any form. (see p. 5 line 12-13) In other words, Yamada explicitly indicates that the complex metal oxide hydrate is for use within a resin composition.

With regard to Claim 2, Yamada teaches that the complex metal hydrate of zinc and aluminum and/or silicon is obtained by reacting water soluble metals in the desired ratio in the presence of water, followed by a step where the resulting precipitates are heated in the presence of water. Further, the simultaneous addition of the reactants allows the formation of precipitated metal salts (or complexes) having a composition corresponding to the concentration of the aqueous solution. (page 4 line 11-21, 33-37).

With regard to Claim 3 and 11, Takai teaches resins which have a similar chemical makeup to those of applicant, specifically, primarily composed of acrylic acid polymerized to yield a gel. (see Example 1, applicant's Referential Example 1) Applicant appears to dry blend the resin and the complex oxide hydrate (see applicant's Example 1) The method advanced by Yamada is to mix the polymer and the resin. (see p. 5 line 12-13) Takai, on the other hand, incorporates the microfiller and any other fillers prior to the drying step (while the resin gel is in a swollen state), and subsequently dries the resin so that the absorptive resin particles contain a built in micro-filler. (See

Art Unit: 1796

col 3 line 45-50, col 15 line 10-13) Takai also teaches that the method may further include surface crosslinking the mixture after drying (col 5 line 30-31) Contrary to a method that merely contacts the dry resin and the complex oxide hydrate, the method of Takai insures that the fillers are contacted to the resin in its swollen state (built in), and surface crosslinking would provide a further security to prevent separation when the gel is in a swollen state. Based on the similarity in the chemical composition of the resin composition of Takai in view of Yamada to that presented by applicant, and the additional steps taught by Takai to insure that any fillers or microfillers would be "built in," it is the examiner's position that a separation ratio consistent with applicants, or less, would be observed from this combination.

With regard to Claim 4, 12, 13, and 14, Takai teaches that the absorbent composition has a particle size from 200 μ m to 700 μ m and preferably 250 μ m to 600 μ m, and the particle size distribution greater than 100 μ m and less than 1000 μ m is 90%, or preferably 95% by mass or more. (see col 16 line 23-26) This presents a particle size distribution that is substantially similar to that required by applicant. Specifically, if the composition has a preferable particle size above 250 μ m but less than 600 μ m, then a typical Gaussian distribution would have the bulk of the particles exceeding 300 μ m in diameter. Takai also teaches that particles larger than 700 μ m will have a lower absorption speed, (see col 16 line 27-30) which would motivate one of ordinary skill in the art to bring the particle size below that size. Furthermore, the dictate that particles outside the range 100 μ m-1000 μ m are less than 95% by mass or more, in combination with the instruction that particles of 200 μ m or more are easier to handle (see col 16 line

Art Unit: 1796

30-37), would motivate one of ordinary skill in the art to avoid particles less than 150 μ m.

One of ordinary skill in the art, given the instructions of Takai with regard to particle size, would arrive at a particle size consistent with that claimed by applicant.

With regard to Claim 5 and 15-21, Yamada teaches a mass ratio from 25/75 to 67/33, which overlaps with applicant's claimed range. (See discussion above, with regard to **Claim 1**)

With regard to Claim 6 - 8, Takai teaches that when the invention is used as an absorbent product, the absorption layer includes the absorbent composition and a fibrous material. (see col 20 line 14-15) Materials such as pulp, synthetic fibers, and natural fibers are enumerated. (see col 20 line 28-33) Pulp is consistent with applicant's "ground wood pulp" (see p. 40 line 25). This is a cellulosic product, and is hydrophilic. This is supported by applicant's inclusion of pulp as a hydrophilic fiber. Furthermore, pulp (deriving from trees or other cellulosic plants) as well as "natural fibers" which include such materials as cotton, are plant components. With regard, specifically, to claim 8, see the discussion with regard to Claim 1, above, for the remainder of the components and limitations.

With regard to Claim 9 and 22, Takai teaches a non-water permeable sheet which is located outside and a water permeable sheet which is located inside (product relative to the body, here "outside" would be consistent with the bottom sheet, and "inside" would be consistent with the top sheet), with a absorption layer located between the two sheets. (see col 20 line 19-22)

With regard to Claims 23 and 25, Takai exemplifies a thermal crosslinking process (surface crosslinked) of 140°C. (See example 2, 8)

With regard to Claims 24 and 26, Takai teaches examples of crosslinking agents used at surface crosslinking process including polyol compounds, such as glycerol, ethyleneglycol, polyethyleneglycol). This is consistent with applicant's "polyhydric alcohol," which includes polyethylene glycols and glycerin (see applicant's p. 15 line 4-8)

9. **Claims 1, 6-10, 22-26** are rejected under 35 U.S.C. 103(a) as being obvious over **Wada et al. (US 2006/0276598)**.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing

Art Unit: 1796

that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2). Specifically, see the discussion above, in paragraph 2.

10. **Claims 1, 4, 6-10, 22-26** are rejected under 35 U.S.C. 103(a) as being obvious over **Ishizaki et al. (US 7473470)**.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2). Specifically, see the discussion above, in paragraph 6.

Response to Arguments

11. Applicant's arguments filed **10/21/08** have been fully considered. Specifically, applicant argues (A) the word "toward" is a synonym of the word "to" and therefore the language of claims 1, 8, and 10 would be understood by one of ordinary skill in the art, (B) **Anderson et al. (US 4,954,562)** does not have an absorbance of 20 g/g or greater under a pressure of 1.9 kPa, as supported by the Declaration submitted by applicant demonstrating that the procedure disclosed in Anderson yields values of 14 g/g, and **Yamada et al. (EP 0,282,287)** does not modify the reference in a manner which would increase this absorbency, and based on this deficiency, the remaining prior art showing structure, method, and other additives also does not meet the limitations set forth in applicant's claims.

With respect to argument (A) applicant's arguments have been fully considered and are persuasive. The objection of the terminology "toward" has been withdrawn.

With respect to argument (B), applicant's arguments have been considered but are moot in view of the new ground(s) of rejection set forth above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darcy D. LaClair whose telephone number is (571)270-5462. The examiner can normally be reached on Monday-Friday 8:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone

Art Unit: 1796

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Darcy D. LaClair
Examiner
Art Unit 1796

/DDL/

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796